

Notice of Allowability

Application No.

10/519,688

Examiner

Igor Kershteyn

Applicant(s)

YONEHARA, RYOICHI

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3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>5/24/06</u> |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>04/11/2005</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input checked="" type="checkbox"/> Other <u>Abstract</u> |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Enoch Peavy (Reg. No. 57,686) on 5/23/06.

The application has been amended as follows:

IN THE CLAIMS:

In claim 1, line 1, "or like" has been deleted.

The above change to the claims has been made to overcome 35 USC § 112, second paragraph rejection.

IN THE SPECIFICATION:

The abstract on a separate sheet of paper as required by 37 CFR 1.72(b) has been entered and is attached to this Office action.

Reasons for allowance

The following is an examiner's statement of reasons for allowance:

The instant invention is deemed to be directed to an unobvious improvement to a gas substance infusing structure over US Patents No. No. 3,100,964 and 6,152,687.

US6,152,687 teaches a centrifugal pressurization pump, comprising: a drum-shaped case in which an intake port 18 and a discharge port 19 are formed, and to which is installed an impeller wheel 2 including a plurality of radially disposed impeller vanes 6; a compression face 24 defining a narrowing compression chamber opposing the impeller vanes 6 from the intake port side facing the impeller wheel 2; and a pressure block 20 on which is formed a pressure divider wall that prevents the leakage of fluid from within impeller chambers 10 formed between the sides of impeller vanes 6, wherein the fluid entering the centrifugal pressurization pump from the intake port 18 is pressurized within a pump chamber formed by the impeller wheel and pressure block and discharged through the discharge port. US6,152,687 does not teach a gas infusion unit that supplies a gas to the intake port based on increased fluid pressure at the discharge port.

US3,100,964 teaches a gas substance infusing structure for a centrifugal pressurization pump, comprising: a gas infusion unit that supplies a gas to the intake port based on increased fluid pressure at the discharge port. US3,100,964 does not teach a drum-shaped case in which an intake port and a discharge port are formed, and to which is installed an impeller wheel including a plurality of radially disposed impeller vanes; a compression face defining a narrowing compression chamber opposing the impeller vanes from the intake port side facing the impeller wheel; and a pressure block on which is formed a pressure divider wall that prevents the leakage of fluid from within impeller chambers formed between the sides of impeller vanes, wherein the fluid entering the centrifugal pressurization pump from the intake port is pressurized within a

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pump chamber formed by the impeller wheel and pressure block and discharged through the discharge port.

There is no motivation for combining the above references.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

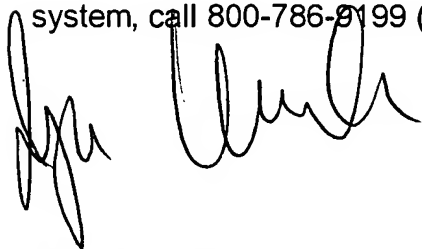
Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Kershteyn whose telephone number is (571) 272-4817. The examiner can normally be reached on regular.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on 308 1044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Igor Kershteyn', is written over the signature line.

Igor Kershteyn
Examiner
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May 24, 2006